STATEMENT OF

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ON BEHALF OF

THE AMERICAN CHEMISTRY COUNCIL

BEFORE THE

SUB-COMMITTEE ON ENERGY AND MINERAL RESOURCES

OVERSIGHT HEARING ON

THE DOMESTIC NATURAL GAS SUPPLY SHORTAGE

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Dow is a leading science and technology company that provides innovative chemical, plastic and agricultural products and services to many essential consumer markets. With annual sales of $28 billion, Dow serves customers in more than 170 countries and a wide range of markets that are vital to human progress, including food, transportation, health and medicine, personal and home care, and building and construction, among others. Committed to the principles of Sustainable Development, Dow and its approximately 50,000 employees provide significant positive contributions that improve not only the global economic condition but also the environment around us.

Dow people around the world develop solutions for society based on Dow's inherent strength in science and technology. For over a decade, we have embraced and advocated Responsible Care® - a voluntary industry-wide commitment to safely handle our chemicals from inception in the laboratory to ultimate disposal. This worldwide commitment helps consumers lead better lives, customers succeed, stockholders prosper, employees achieve and communities thrive.

For Dow as for the Chemical Industry in general, natural gas is an essential fuel and raw material. Natural gas is used to generate electricity and steam using highly efficient and environmentally sound Combined Heat and Power (CHP). Other components of natural gas, such as ethane, propane, butane, pentane, and natural gasoline are major raw material “feedstocks” used to make the basic building blocks of organic chemistry. This dual importance of natural gas makes efficient use of this resource an imperative for Dow and the industry. For example, Dow working to achieve its publicly stated goal of reducing the amount of energy needed to produce a pound of product by 2 percent per year from 1995-2005. This is in addition to a 20 percent improvement from 1990-1994.

In response to challenging business conditions brought about partly from the rising cost of energy, Dow is dedicating additional resources and programs to reduce energy usage. Dow is also undertaking projects to use renewable energy, as evidenced by a recent decision to tap landfill gas to power a plant on Georgia, and the announced collaboration with General Motors to generate up to 35 megawatts of fuel cell power at its site in Freeport, Texas, using by-product hydrogen from its manufacturing processes.

The American Chemistry Council (ACC) represents the U.S.’s leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to produce innovative products and services that make people’s lives better, healthier and safer. ACC is committed to improved environmental, health and

safety performance through Responsible Care, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The $460 billion business of chemistry is a key element of the nation's economy. It is the country's largest exporter, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies invest more in research and development than any other business sector. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

Factors Fueling the Natural Gas Crisis

An array of factors is contributing the unprecedented costs for natural gas. Here are some key indicators:

Last winter, the nation experienced the largest supply deficit in history, 1.5 trillion cubic feet.

Current storage figures are below historical averages (25 percent below as of 6/6/03) in spite of recent record injection rates.

Domestic gas production has been decreasing as five of the nation's largest supply areas are in decline.

Demand for natural gas by U.S. electric power generators has risen by 33 percent in the past 5 years as nearly every power plant constructed during that period is natural gas fired.

Imports from Canada are poised to decline sharply their electric utilities place greater reliance upon gas to meet emissions targets under the Kyoto Protocol and production drops off in more mature fields.

· Last month, the Northeastern NOx reduction plan commenced, encouraging greater reliance upon natural gas for power generation.

· Markets remain jittery as Congress has shown little willingness to support policies that would significantly increase production.

Today's hearing comes at a time when the United States is facing a natural gas crisis. Prices for natural gas in the U.S. are the highest in the world. American consumers will pay $70 billion more for gas in 2003 than in 2002 --- $70 billion. Natural gas storage levels are near record lows. Only continued record injection rates, helped by a mild summer, will ensure adequate supplies this winter. Clearly, supply and demand are out of balance, and weather is neither the cause nor the answer. And, praying for rain is a poor substitute for a rational energy policy.

This current shortfall developed while the economy was struggling and was further masked by a string of mild winters. As a result, overall demand growth was suppressed. Yet in January of 2001, prices reached a then record high of over $10.00. In the past, price increases have brought a production response, but today that no longer seems true. In the wake of the January 2001 price increase the "rig count" peaked at over 1,000. However, these new rigs were being put into mature fields and the result was a negligible increase in production. As prices climbed during the summer of 2002, after falling below $4.00 in late 2001, gas producers failed to show the same response, because they now understand that putting new rigs in old fields is not a wise investment.

A further indication of the decline of existing domestic gas fields is that the natural gas industry has tripled the number of rigs drilling new wells over 15 years. The number of producing gas wells has also tripled – yet production is still declining. With gas production having peaked in the U.S. in 1971, it could not be clearer that the industry needs access to new areas.

Policy Recommendations

Enact provisions to streamline permitting of new natural gas production and transmission facilities

Reform the Coastal Zone Management Act to ensure timely resolution of permit applications and provide greater certainty for all participants

End current moratoria on exploration and production on federal lands both on and off-shore and direct the

Department of Interior to proceed with leases in those areas.

Bolster the recent rule by the Department of Interior to encourage “deep gas” production.

Provide royalty relief and other incentives to encourage greater production from marginal wells both on and off-shore.

Provide for reimbursement of private party NEPA costs that are the responsibility of the federal government.

Demand for natural gas by residential and commercial users has barely grown over 30 years – thanks to better insulation and other efficiency improvements. Industry’s use of gas hasn’t grown either. But the demand for gas in the power sector is booming -- up almost 40 percent in 5 years, as almost all new power plants have been based on gas. This over-reliance on gas as a growth fuel for power generation is why we have a natural gas crisis.

In his appearance before the Energy and Commerce Committee last week, Federal Reserve Chairman Alan Greenspan was asked if Congress or the Administration could do anything to improve the short term situation. His answer was a flat “No.” Dow does not hold as pessimistic a view as Chairman Greenspan, but we do understand that the options are limited and would not by themselves supplant the need for more gas production.

Among the limited options to moderate prices and improve the storage situation going into the winter months, the most important is conservation. Currently the nation generates a little over 20 percent of its electricity from gas and a large portion of that is from gas-fired “peaker units” that only operate at periods of high demand. A reduction in electricity demand from conservation would first back out power from these peaker units and save natural gas. Dow’s internal estimates, derived from data from the Energy Information Agency, project that a 5 percent saving in power use could cut gas use for power generation by 25 percent. For the summer months no other remedy can free up as much gas.

To this end, we recommend that the President set an aggressive goal to reduce electricity and gas consumption by federal agencies – immediately. The President must also call upon the public to conserve. For its part Dow has stepped up to the plate with a public commitment to improve its energy efficiency 20 percent from 1995 through 2005.

Another way to reduce gas demand would be to encourage power generators to switch to distillate fuels. Many new power plants are equipped to burn distillate but are limited by permit to only a few days per year. Improving flexibility for these plants can go a long way to ensure that our natural gas supplies are not depleted for summer power generation and are available to heat homes and power industries this winter.

For the medium term, Congress, with the aid of this Committee, should make all reasonable efforts to increase domestic natural gas production. Congress should end the moratoria on exploration and production for natural gas on federal lands, both on and offshore. The Department of Interior should be directed by Congress to begin the process of leasing those areas as quickly as possible. Permitting of production facilities and pipelines to access new gas supply should be streamlined. Incentives for states to allow production should be developed. All these should be done while taking care to consider the environmental impact. However, we must also consider the environmental consequences of our failure to increase domestic gas supply. Responsibly produced and affordable natural gas is key to achieving our broader environmental goals, including improving air quality and reducing greenhouse gas emissions.

Other nations with strong environmental ethics recognize the inextricable link between their environmental goals and natural gas, and are encouraging production both on- and offshore. Countries such as Canada, Great Britain, Norway, and Japan have recognized that increasing their domestic production of natural gas will help them improve their environmental conditions and continue to grow their economies. Great Britain and Norway have aggressively pursued natural gas production off their coasts in the North Sea.

Norway’s Statoil is the largest producer in the eastern half of the North Sea. At the far left is a map of the lease areas with the Statoil production platforms marked. Also at left is a map of undersea pipelines that connect the various rigs in to England and the Continent.

British companies have also been encouraged to explore for and produce natural gas off of that nation's shores. Below is a map of one company's (BG Group) natural gas and oil production operation off the eastern coast of England. Some fields are being safely and cleanly produced as close as 25 miles from shore. Many additional gas fields to the North are also being produced.

ENGLAND

London

England, once a nation heavily dependent upon imported energy, is now one of the world's leading exporters of energy because of its willingness to allow for production off its shores. The British economy that, as recently as the 1970s, was crippled by energy shortages is now enjoying a period of extended price stability and sustained growth.

Other European nations are benefiting from natural gas imports from the North Sea and from the former Soviet republics. The fall of the Eastern Bloc has allowed for natural gas once trapped due to political boundaries to now flow into Western Europe, helping to fuel industry and attract jobs.

Japan has also undertaken natural gas production both on-shore as well as near shore. Its Iwaki Gas Field, less than 30 miles from the Japanese mainland, began production in the mid-1980s and continues today. Notoriously energy resource poor, the Japanese have welcomed natural gas discoveries off their shores as well as those to their north off of Russia's Sakhalin Island.

Closer to home, Canada has also realized that its environmental goals are riding on the back of natural gas. Sizable natural gas finds off of Nova Scotia buoyed not only Canada's energy markets but benefited nearby New England gas consumers. Production on these off shore fields began in the late 1990s. More new drilling rigs are scheduled to go into the field in the coming years, as well, to meet Canada's growing demand and environmental goals.

Below are maps indicating the location of gas production facilities both on and off of Nova Scotia.

Looking to the future, the U.S. must take a comprehensive look at environmental and economic goals. As Norway, Britain, Japan and Canada have demonstrated, there need not be a choice between a clean environment and energy production. Natural gas prices in Europe are currently well below those in the U.S. Canada's prices have recently moved upward as a result of its market being integrated with ours. Japan's market, which competes with the U.S. for shipments of liquid natural gas (LNG) brought in by ship, has for the first time in history enjoyed prices comparable to ours, yet more stable.

Like the United States, these countries have encouraged the use of natural gas for electric power generation. Unlike the U.S. these counties do not have near the reliance on gas for home heating, so its use is limited to power generation and industrial needs. Understandably, each nation is projecting continued growth in demand for natural gas for their economies and the environment. As global competition for this clean burning fossil fuel increases it will be those nations that take the necessary steps to utilize their domestic natural gas reserves that will be able to meet their environmental and economic goals.

In planning for the long term we must recognize how the U. S. consumes its energy today. The largest sector of use is electric power at 40 percent of our energy use – larger than transportation or heating. It is also the fastest growing sector.

For too many years US energy policy has violated the fundamental law of supply and demand. It is not sustainable to promote policies that drive up demand for an energy source yet restrict access to it at the same time.

We are trying to fuel practically every new kilowatt of electricity with a fuel source that is in steady decline. It won't work. Electricity must come from a diverse mix of renewable energy, nuclear, clean coal, LNG and natural gas produced from new domestic sources.

Finally, for those who doubt a correlation between natural gas costs and industrial output, the following graph clearly shows the impact of the price spike of January, 2001. Industrial production peaked in 2000, then dropped with the $10 price spike and has not recovered. Following that sharp increase industrial

production began to drop off of the growth that had been constant for the preceding 10 years.

It is a valid question to ask whether we have the will to produce enough natural gas to supply our economy. Every recession in modern history has been preceded by an energy crisis. Natural gas shortages have contributed to our current economic slowdown and Chairman Greenspan promised that we have not seen the worst if costs remain high. Furthermore, our nation’s continued progress in improving the quality of our environment will also be jeopardized unless we are able to bring more natural gas to market at prices that were counted on when our goals were established. In both cases, economic and environmental, we can’t get where we want to go without affordable natural gas. The Dow Chemical Company and the American Chemistry Council remain hopeful that Congress and the Administration will quickly address these challenges. The nation's economic recovery depends on it.